Update: The Cannabis Industry Energy Challenge
1970 Federal Controlled Substances Act
1972 California Uniform Controlled Substances Act
1996 Compassionate Use Act (Prop. 215) authorized medical use in 1996, with no regulatory guidance
2004 SB420 enacts defense to state criminal charges for collectives, creates medical card guidelines
2008 Memorandum from Attorney General Jerry Brown provides operating guidelines
2015 Medical Cannabis Regulation and Safety Act (MCRSA) created comprehensive statewide regulatory and licensing system
2016 Adult Use of Marijuana Act (Prop. 64) legalized non-medical commercialization and created regulatory, licensing system
2017 SB-94 Creates Combined Medicinal and Adult Use Cannabis Regulation and Safety Act (MAUCRSA)
2018 State Licenses and Regulations for Commercial Medical and Adult Use Businesses Begin
Licensing Process Under MAUCRSA

- All commercial cannabis activity requires a license from governing state agency (CDFA, CDPH, BCC)
- Draft regulations issued and withdrawn after passage of SB-94
- Emergency regulations to be published in November 2017
- Temporary licenses available January 2018, pending final licensing
- Activity must be authorized by local law, effectively requiring licensing by city/county officials.
**State Licensing Types**

*Cultivation*, with 3 sizes (Speciality/Small/Medium) and 3 types (Indoor/Mixed-light/Outdoor), plus a nursery category

*Manufacturing* covers cover extraction and manufactured products, including volatile solvent and non-volatile types

*Retailer* including delivery-only

*Distributor* wholesale and transportation

*Microbusiness* vertically integrated operations under a single license

*Testing Laboratory* for required testing
Energy Use Overview
### Local Ordinances on Energy

<table>
<thead>
<tr>
<th>County</th>
<th>Ordinance</th>
<th>Summary of Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humboldt</td>
<td>Ordinance No 2544</td>
<td>Electrical power for indoor cultivation shall be provided by on-grid power with 100 percent renewable source, on-site net-zero-energy renewable source, or the purchase of carbon offsets of any portion of power not from renewable sources.</td>
</tr>
<tr>
<td>Mendocino</td>
<td>Ordinance No. 4356</td>
<td>Indoor cultivation may not rely on diesel generators for a source of power.</td>
</tr>
<tr>
<td>Monterey</td>
<td>Ordinance No. 5270</td>
<td>On-site renewable energy generation shall be required for all indoor cultivation activities. Renewable energy systems shall be designed to have a generation potential equal to or greater than one half of the anticipated energy demand.</td>
</tr>
</tbody>
</table>

### Energy Use Requirements

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<td>Mendocino</td>
<td>Ordinance No. 4356</td>
<td>Light assistance for outdoor cultivation must not exceed 600 watts per 100 square feet of growing area.</td>
</tr>
<tr>
<td>Sacramento</td>
<td>Ordinance No. 2016-0006</td>
<td>Indoor grow lighting systems shall not exceed 3,800 watts; also limits square footage to 400 square feet.</td>
</tr>
<tr>
<td>Yolo</td>
<td>Ordinance No. 1542</td>
<td>Use of light assistance for outdoor cultivation shall not exceed 600 watts per 100 square feet of growing area.</td>
</tr>
</tbody>
</table>
Draft CDFA Regulations Section 8315 (Withdrawn)

Indoor license types of all sizes shall ensure that electrical power used for commercial cannabis activity shall be provided by any of the combination of the following:

1. On-grid power with 42 percent renewable source.
2. Onsite zero net energy renewable source providing 42 percent of power
3. Purchase of carbon offsets for any portion of power above 58 percent not from renewable sources.
4. Demonstration that the equipment to be used would be 42 percent more energy efficient than standard equipment, using 2014 as the baseline year for such standard equipment.
Amended San Francisco Ordinance:

Every cannabis business shall ensure the electrical power used for commercial cannabis activities shall be procured from or produced by renewable sources (minimum renewable energy CleanPowerSF Green product).

Energy efficiency assessment in first year of operation

Annually document 12-months of source consumption data; AND

Conduct an Energy Efficiency Audit Report, as may be required by Chapter 20 of the Environment Code (ECBO)

Applicability: All commercial cannabis activity including but not limited to indoor cultivation license types of all sizes, extraction, manufacturing and retail.
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